

Queries to the Author

Chapter Number: 13

Chapter Title: Risk Mitigation and Performance Criteria

Query	Description	Author's Response
1.	<p>Section: REGULATORY RISK MITIGATION METHODS</p> <p>AUTHOR: Please check for clarity of the sentence “Note that the understory may represent an attractive source of nutrition for the bees separate from, or in addition to, the cultivated crop.”</p>	<p>In the section with this sentence please switch the order of the first two sentences so that it reads as follows:</p> <p>“The understory of a crop may represent an attractive source of nutrition for the bees separate from, or in addition to, the cultivated crop; and, can be a source of either foliar (<i>e.g.</i>, from aerial drift) or systemic (when pesticide residues in the soil are taken up by understory flora) exposure to pesticides applied on field.”</p>
2.	<p>Section: REGULATORY RISK MITIGATION METHODS</p> <p>AUTHOR: We have changed the sentence “However, it is important... arthropod fauna.” to “However, it is important to note that by eliminating understory forage (as a source of exposure) also forfeits this material as a source of forage or habitat for both pollinators and arthropod fauna.” Please confirm that the edit is OK.</p>	<p>OK, however, as I read your suggested change, does the sentence sound better if it is written as follows:</p> <p>“However, it is important to note that by eliminating understory forage (as a source of exposure) also forfeits this material as a source of forage or habitat for both pollinators and arthropod fauna.”</p>
3.	<p>Section: REGULATORY RISK MITIGATION METHODS</p> <p>AUTHOR: Could you please confirm whether the sentence “Further, it may be difficult to move managed bees “on demand” since the configuration of the colonies, number of colonies, and the bee activity level effect how quickly stock can be relocated (or protected)” preserves its intended meaning?</p>	<p>Yes, the meaning is preserved and the suggested change is good.</p>

<p>4. Section: NON-REGULATORY RISK MITIGATION METHODS</p> <p>AUTHOR: Please confirm the usage of “fines” in the sentence “Ridge tops are preferable... wind currents.”</p>	<p>The word “fines” can be replaced with “drift” and in addition “insecticide” can be replaced with “pesticide”... please preplace the original sentence with the following:</p> <p>“Ridge tops are preferable to canyon bottoms, as pesticides can drift down into canyons and flow with morning wind currents.</p>
<p>5. Section: SUGGESTED TECHNIQUES TO MITIGATE RISKS TO OTHER SPECIES OF BEES</p> <p>AUTHOR: Please confirm the usage of “on in fence rows” in the sentence “Blooms of any type... pollinators as well).”</p>	<p>For clarity, the sentence can be changed to:</p> <p>“Blooms of any type, including weedy species that may be available in areas adjacent to the crop site areas on in fence rows, may serve as nesting sites or as a nutritional source for native pollinators (as it is for managed pollinators as well).</p>
<p>6. Section: References</p> <p>AUTHOR: Year has been introduced as “2011” in Ref. Alix et al. and also please check whether the web address provided is correct or not. Also provide the last accessed date for the URL.</p>	<p>Please change the website reference to:</p> <p>[HYPERLINK "http://www.pollinator.org/PDFs/OPERARReport.pdf"]</p> <p>I accessed this document on 1/14/14</p>
<p>7. Section: References</p> <p>AUTHOR: Please provide the date and place of Symposium held, if deemed necessary in Ref. “Pistorius et al, 2009”</p>	<p>The date of the conference was October 8 – 10, 2008, please insert the date if Wiley/SETAC believes it is necessary.</p> <p>In addition, the link to the proceedings of that conference is: [HYPERLINK "http://www.jki.bund.de/fileadmin/dam_uploads/_.../JKI_Archiv_423.pdf"]</p>
<p>8. Section: References</p>	<p>The publication does not provide any information about the publisher</p>

	AUTHOR: Please provide the place of publication in Ref. Vaughan et al. 2007 if deemed necessary.	or its location of publication
9.	Section: References AUTHOR: Please provide the year for Ref. “Vaughan et al.”	That reference should be identified as follows: Vaughan, M. and Skinner. Using Farm Bill Programs or Pollinator Conservation, Technical Note No. 78., US Department of Agriculture, Natural Resources Conservation Service and Xerces Society for Invertebrate Conservation, 2008.
10.	Section: References AUTHOR: Ref. “Thompson and Thorbahn (2009)” has not been cited in the text. Please confirm.	This reference can be removed.
11.	Section: References AUTHOR: The following references have not been listed. Please check. <ul style="list-style-type: none"> • Taséi (2002) • JORF (2010) • Kim et al. (2006) • Shuler et al. (2005) • Vaissière et al. (1985) • Cane (2008) • Thompson and Hunt (1999) • Bosch and Kemp (2001) • Sampson et al. (2007) • Thompson 2001 	Tasei, J. N. (2002) Impact of agrochemicals on non-Apis bees. In J. Devillers and M.-H. Pham-Delegue [eds.], Honey bees: estimating the environmental impact of chemicals. Taylor & Francis, New York. For JORF (2010): I cannot find the reference so, let’s change the text to the following: “Tank-mixing certain types of compounds may result in interactive effects that can enhance to toxicity of the mixture to bees, such as in the case of pyrethroids and EBI fungicides. (France has recently prohibited tank mixes of triazole fungicides and pyrethroids (JORF, 2010).) Kim et al. (2006): reference for this is: Kim J, Williams N, Kremen C. 2006. Effects of cultivation and proximity to natural habitat on ground-nesting native bees in California sunflower fields. Journal of the Kansas Entomological

	<p>Society. 79:309-320.</p> <p>For Shuler et al. (2005): the reference should be: Shuler RE, Roulston TH, Farris GE. 2005. Farming practices influence wild pollinator populations on squash and pumpkin. Journal of Economic Entomology. 98:790-795.</p> <p>Vaissière et al. (1985): replace this reference with the following: Delaplane, K., and Mayer, D., Crop Pollination by Bees, CABI, 2000.</p> <p>Cane 2008: use the following reference: Cane, J.H. 2008. A native ground nesting bee, <i>Nomia melanderi</i>, sustainably managed to pollinate alfalfa across an intensively agricultural landscape. <i>Apidologie</i>. 39: 315-323</p> <p>Thompson and Hunt: use the following reference: Thompson HM, Hunt LV. 1999. Extrapolating from honeybees to bumblebees in pesticide risk assessment. <i>Ecotoxicology</i>. 8:147–166.</p> <p>Bosch and Kemp (2001): use the following reference: Bosch J, Kemp W. 2001. How to Manage the Blue Orchard Bee as an Orchard Pollinator. Sustainable Agriculture Network. Beltsville, MD.</p> <p>Sampson et al. 2007: use the following reference: Sampson BJ, Knight PR, Cane JH, Spiers</p>
--	--

	<p>JM. 2007. Foraging behavior, pollinator effectiveness, and management potential of the new world squash bees <i>Peponapis pruinosa</i> and <i>Xenoglossa strenua</i> (Apidae: Eucerini). HortScience. 42: 459.</p> <p>For Thompson 2001: please delet this citation, it is not necessary.</p>
<p>12. Section: REGULATORY RISK MITIGATION METHODS</p> <p>AUTHOR: Please check whether “<i>Product Formulation</i>” needs to be given as the continuation of the list “<u>Crops Requiring Pollination by Bees:</u>” or as the sublist of “<u>Crops Requiring Pollination by Bees:</u>”</p>	<p>Let’s move “Crops Requiring Pollination by Bees” out (i.e., let’s not list it as sub-section “a”.</p> <p>Than lets’s include the subsequent sections, i.e., product formulation, method of application, etc., as bulleted and indented paragraphs.</p>
<p>13. Section: NON-REGULATORY RISK MITIGATION METHODS</p> <p>AUTHOR: Please provide the expansion for “IPM” if deemed necessary.</p>	<p>Please spell out so it reads as follows:</p> <p>“Beekeepers, growers, and applicators together with IPM agents (Integrated Pest Management), agricultural extension agents ... and the beekeeper.”</p>
<p>14. Section: Global</p> <p>AUTHOR: Please check whether we have set all the heading levels appropriately as follows.</p> <p>13.1 THE ROLE OF RISK MANAGEMENT IN POLLINATOR PROTECTION</p> <p>13.2 REGULATORY RISK MITIGATION METHODS</p> <p>13.3 NON-REGULATORY RISK MITIGATION METHODS</p> <p>13.4 SUGGESTED TECHNIQUES TO MITIGATE RISKS TO OTHER SPECIES OF BEES</p> <p>13.4.1 NESTING AND MOVING BEES</p>	<p>These heading look appropriate.</p> <p>I will 2x check all headings in the manuscript</p>

<p>13.4.2 TIMING OF APPLICATION</p> <p>13.5 PESTICIDE APPLICATION TECHNOLOGIES TO MITIGATE EXPOSURE TO BEES</p> <p>13.5.1 MITIGATION FOR EXPOSURE TO SEED TREATMENT DUST</p> <p>13.5.2 SEED COATING QUALITY</p> <p>13.5.3 SEEDING TECHNOLOGY</p> <p>13.5.4 SOIL APPLIED USES</p> <p>13.5.5 IPM/CROP ROTATION</p> <p>13.5.6 LANDSCAPE MANAGEMENT</p>	
<p>15. Section: References</p> <p>AUTHOR: Please provide the last accessed date for http://journals.lww.com/epidem/Fulltext/2004/09000/Eco_Epidemiology__Thinking_Outside_the_Box.4.aspx</p>	<p>This link appears to be good. I accessed it on 1/18/14</p>